

IN THE CLAIMS

Amend the claims as follows:

1.(currently amended) A pump device for gaseous fluid, comprising an ion generating region having an electron-emitting cathode electrode for generating unipolar ions in the fluid and a separate pumping region disposed downstream of the ion generating region, said pumping region including pumping electrodes for generating an electric field in a manner that imparts motion to the ions and thus to the fluid.

2.(original) The pump device of claim 1 wherein the electron-emitting cathode electrode emits electrons at room temperature in atmospheric air.

3. (currently amended) The pump device of claim 1 further including an anode disposed at the ion generating region and to which a positive voltage bias is applied to cause the cathode electrode to emit electrons into the fluid.

4.(original) The pump device of claim 1 wherein the electron-emitting cathode electrode includes a conical tip.

5.(original) The pump device of claim 1 wherein the pumping region comprises a series of pumping electrode sets whose polarity is switched in a manner to generate an electric field that imparts motion to the unipolar ions and thus the fluid in the direction.

6.(original) Combination of a heat generating electronic component and a cooling system in thermal transfer relation with the heat-generating component to remove heat therefrom using a gaseous heat transfer fluid, said cooling system including a plurality of pump devices of claim 1 to impart motion to the heat transfer fluid relative to the heat-generating component.

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7.(original) The combination of claim 6 wherein the pumping electrodes reside on one or more heat transfer surfaces.

8.(original) The combination of claim 7 wherein the one or more heat transfer surfaces comprise one or more surfaces of the component or a heat sink in heat transfer relation with the component.

9-18. (canceled)

19.(currently amended) A gaseous fluid pump, comprising a series of pumping electrodes disposed along a fluid flow path and whose polarity is switched in a manner for generating an electric field in a manner that imparts motion to unipolar ions present in the gaseous fluid and thus to the fluid in the direction of the flow path.

20.(original) The pump of claim 19 wherein the electric field imparts motion to unipolar ions present in air.

21.(currently amended) A gaseous fluid pump, comprising a first electrode and a second electrode disposed along a fluid flow path and whose polarity is switched in a manner for generating an electric field that imparts motion to unipolar ions present in the gaseous fluid and thus to the fluid in the direction of the flow path.

22.(new) A pump device for gaseous fluid, comprising a) an ion generating region having an anode and an electron-emitting cathode electrode for generating unipolar ions in the fluid and b) a pumping region disposed downstream of the ion generating region, said pumping region including a series of pumping electrodes whose polarity is switched in a manner to generate an electric field that imparts motion to the ions and thus to the fluid.